



A STUDY OF FOREIGN BODIES IN AERODIGESTIVE TRACT IN GOVT GENERAL HOSPITAL, VIJAYAWADA

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ABSTRACT **Aim And Objective:** The main aim of this study was to assess the modes of presentation, common sites and nature of different foreign bodies (FB) in Aerodigestive tract. **Materials And Methods:** This retrospective study of FB in Aerodigestive tract was carried out in Government General hospital, Siddhartha Medical College, Vijayawada. The period of study was for 1 years and the study population included patients presenting with FB in the out-patient department and in the emergency department. Study population was 87 in number which included patients with foreign bodies both in air passage and food passage. Out of the 87 patients, 56 were found to be foreign bodies within air passage, while 31 had them in their food passage. Nose was observed to be the commonest site among the patients with FB in their air passage, while hypopharynx was the most common location in food passage. These patients were further analysed based on the type of foreign body lodged and according to the age groups of patients.

KEYWORDS : Foreign bodies, Aerodigestive tract, nose, hypopharynx.

INTRODUCTION:

Aspiration and ingestion of foreign bodies into aerodigestive tract accidentally lead to otolaryngologic emergencies. Majority get impacted in the narrowest sites of the tract. Foreign body like fish bone usually gets lodged in fleshy areas like tonsil, base of tongue, vallecula and posterior pharyngeal wall and subglottis. Entry into the right main bronchus is more often than into left bronchus as the right bronchus is straight in line with trachea, shorter and more in diameter. Once the foreign body crosses the narrowest cricopharynx and enters the oesophagus, it usually enters the stomach. (1) AFB may be classified as animate and inanimate. Inanimate can be classified into vegetative and non-vegetative, hygroscopic and non-hygroscopic.

METHODOLOGY:

Our study population includes 87 patients presenting with FB out of around 20,000 patients that presented to the OPD in the period of 1 years, in Department of ENT, Government General hospital, Siddhartha Medical college, Vijayawada. Cases were divided according to the location of foreign body into FB in air passage and FB in food passage. Further they were classified according to the exact location of the foreign body. A thorough clinical examination was done and plain radiographs of neck, chest and abdomen were taken in required views for the visualization of a radio opaque foreign body whereas fluoroscopy using barium for a non-radio opaque foreign body.

Most foreign bodies were removed in EMOT while some of the cases required general anesthesia as they were impacted deep down in the air or food passages. As most of the patients were in the pediatric age group, general anesthesia was given after doing thorough preanesthetic examination. (2,3) None of the patients had any complications during removal.

OBSERVATIONS AND RESULTS:

A total of 87 patients presented with a foreign body in aerodigestive tract in the department of ENT, Siddhartha Medical College, Vijayawada. Out of the 87, air passage was found to be the commonest location of the foreign body, particularly nose (41.32%), which is followed by hypopharynx (23.96%) and oesophagus. (4) (14.04%) Nose was the commonest location of the foreign body in air passage, (5) (70.42%) where as in food passage, hypopharynx (58%) was the commonest site. FB in air passage occurred commonly in pediatric age group (0-10 years) while middle age group (20-40 years) commonly suffered from the lodgment of foreign body in the food passage.

DISCUSSION:

In this study, it was observed that foreign body in the air passage is commonly seen in children whereas the foreign body in food passage were seen in all age groups. Usual foreign bodies include fish bone, coin, bone piece, nails, buttons, dentures, ear rings.

Organic foreign body was more common (62%) than inorganic (20%). Common sites of the aerodigestive tract include nose, hypopharynx, oesophagus and bronchus. Foreign body related complications like retropharyngeal abscess, lung collapse, consolidation were about 6%. A large number of patients were in the pediatric age group as seen in the findings of the study. Out of all patients, around 90% came in with a positive history of FB aspiration or ingestion. In cases of aspirated FB there was definitive history of pharyngeal cough, choking and wheeze in 90% of patients and in case of ingestion there was a history of dysphagia. Plain radiographs of the neck, chest and abdomen identify the radio opaque FB, while fluoroscopy using barium for non-radio opaque foreign body. In our study, 43% were radioopaque and 57% non radioopaque. Complications like esophageal perforation, abscess, emphysema, tracheoesophageal fistula can occur. (6) However we have not encountered them. Predisposing factors like strictures, muscular disturbances, esophageal malignancies can present with foreign body impaction.

CONCLUSION:

Foreign body in the aerodigestive tract is not uncommon. In this study, the commonest site of the foreign body in the aerodigestive tract was observed to be in the air passage, commonly nose, followed by in the food passage, commonly hypopharynx. They are mostly observed in children owing to their natural propensity to put things in the nose and mouth, inability to masticate well, cry, laugh and shout while eating or playing. Mental retardation, alcoholism, anxiety can also compound the problem. Thorough examination and radiographic findings will help to know the exact location of the FB. Most of them are removed in the EMOT. They are common in children. Parents and public need to be educated to decrease the incidence of the FB. Media and educational campaigns should create awareness among people, the precautions and also regarding the seriousness of complications of FB in aerodigestive tract.

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